

Serial Number: 10/057,531A

CRF Processing Date: 10/11/2002
Edited by: A
Verified by: A (STIC staff)**ENTERED**

#8

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☒ Other: Corrected <1507 and <1517 sections



OIPE

RAW SEQUENCE LISTING

DATE: 10/01/2002

PATENT APPLICATION: US/10/057,531A

TIME: 19:41:33

Input Set : N:\Crf3\09232002\J057531A.raw

Output Set: N:\CRF4\10012002\J057531A.raw

1 <110> APPLICANT: Lyon, Jeffrey A.
 2 Angov, Evelina
 3 <120> TITLE OF INVENTION: Isolation and Purification of P. falciparum Merozoite
 4 Protein-142 Vaccine
 5 <130> FILE REFERENCE: 003/241/SAP
 C--> 6 <140> CURRENT APPLICATION NUMBER: US/10/057,531A
 7 <141> CURRENT FILING DATE: 2002-01-25
 8 <150> PRIOR APPLICATION NUMBER: US 60/264,535
 9 <151> PRIOR FILING DATE: 2001-01-26
 10 <150> PRIOR APPLICATION NUMBER: US 60/347,564
 11 <151> PRIOR FILING DATE: 2001-10-26
 12 <160> NUMBER OF SEQ ID NOS: 12
 13 <170> SOFTWARE: Apple Macintosh Microsoft Word 6.0
 15 <210> SEQ ID NO: 1
 16 <211> LENGTH: 546
 17 <212> TYPE: PRT
 18 <213> ORGANISM: Artificial sequence
 19 <220> FEATURE:
 20 <223> OTHER INFORMATION: E. coli expressed P. falciparum MSP142 (3D7) Protein
 21 Sequence in pET-Trx42
 22 <400> SEQUENCE: 1
 23 Met Ser Asp Lys Ile Ile His Leu Thr Asp
 24 1 5 10
 25 Asp Ser Phe Asp Thr Asp Val Leu Lys Ala
 26 15 20
 27 Asp Gly Ala Ile Leu Val Asp Phe Trp Ala
 28 25 30
 29 Glu Trp Cys Gly Pro Cys Lys Met Ile Ala
 30 35 40
 31 Pro Ile Leu Asp Glu Ile Ala Asp Glu Tyr
 32 45 50
 33 Gln Gly Lys Leu Thr Val Ala Lys Leu Asn
 34 55 60
 35 Ile Asp Gln Asn Pro Gly Thr Ala Pro Lys
 36 65 70
 37 Tyr Gly Ile Arg Gly Ile Pro Thr Leu Leu
 38 75 80
 39 Leu Phe Lys Asn Gly Glu Val Ala Ala Thr
 40 85 90
 41 Lys Val Gly Ala Leu Ser Lys Gly Gln Leu
 42 95 100
 43 Lys Glu Phe Leu Asp Ala Asn Leu Ala Gly
 44 105 110

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Output Set: N:\CRF4\10012002\J057531A.raw

45	Ser Gly Ser Gly His Met His His His His	
46		115 120
47	His His Ser Ser Gly Leu Val Pro Arg Gly	
48		125 130
49	Ser Gly Met Lys Glu Thr Ala Ala Ala Lys	
50		135 140
51	Phe Glu Arg Gln His Met Asp Ser Pro Asp	
52		145 150
53	Leu Gly Thr Asp Asp Asp Asp Lys Ala Met	
54		155 160
55	Ala Asp Ile Gly Ser Ile Glu Gly Arg Gly	
56		165 170
57	Thr Met Ala Ile Ser Val Thr Met Asp Asn	
58		175 180
59	Ile Leu Ser Gly Phe Glu Asn Glu Tyr Asp	
60		185 190
61	Val Ile Tyr Leu Lys Pro Leu Ala Gly Val	
62		195 200
63	Tyr Arg Ser Leu Lys Lys Gln Ile Glu Lys	
64		205 210
65	Asn Ile Phe Thr Phe Asn Leu Asn Leu Asn	
66		215 220
67	Asp Ile Leu Asn Ser Arg Leu Lys Lys Arg	
68		225 230
69	Lys Tyr Phe Leu Asp Val Leu Glu Ser Asp	
70		235 240
71	Leu Met Gln Phe Lys His Ile Ser Ser Asn	
72		245 250
73	Glu Tyr Ile Ile Glu Asp Ser Phe Lys Leu	
74		255 260
75	Leu Asn Ser Glu Gln Lys Asn Thr Leu Leu	
76		265 270
77	Lys Ser Tyr Lys Tyr Ile Lys Glu Ser Val	
78		275 280
79	Glu Asn Asp Ile Lys Phe Ala Gln Glu Gly	
80		285 290
81	Ile Ser Tyr Tyr Glu Lys Val Leu Ala Lys	
82		295 300
83	Tyr Lys Asp Asp Leu Glu Ser Ile Lys Lys	
84		305 310
85	Val Ile Lys Glu Glu Lys Glu Lys Phe Pro	
86		315 320
87	Ser Ser Pro Pro Thr Thr Pro Pro Ser Pro	
88		325 330
89	Ala Lys Thr Asp Glu Gln Lys Lys Glu Ser	
90		335 340
91	Lys Phe Leu Pro Phe Leu Thr Asn Ile Glu	
92		345 350
93	Thr Leu Tyr Asn Asn Leu Val Asn Lys Ile	

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Output Set: N:\CRF4\10012002\J057531A.raw

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94          355          360
95  Asp Asp Tyr Leu Ile Asn Leu Lys Ala Lys
96          365          370
97  Ile Asn Asp Cys Asn Val Glu Lys Asp Glu
98          375          380
99  Ala His Val Lys Ile Thr Lys Leu Ser Asp
100         385          390
101  Leu Lys Ala Ile Asp Asp Lys Ile Asp Leu
102         395          400
103  Phe Lys Asn Pro Tyr Asp Phe Glu Ala Ile
104         405          410
105  Lys Lys Leu Ile Asn Asp Asp Thr Lys Lys
106         415          420
107  Asp Met Leu Gly Lys Leu Leu Ser Thr Gly
108         425          430
109  Leu Val Gln Asn Phe Pro Asn Thr Ile Ile
110         435          440
111  Ser Lys Leu Ile Glu Gly Lys Phe Gln Asp
112         445          450
113  Met Leu Asn Ile Ser Gln His Gln Cys Val
114         455          460
115  Lys Lys Gln Cys Pro Glu Asn Ser Gly Cys
116         465          470
117  Phe Arg His Leu Asp Glu Arg Glu Glu Cys
118         475          480
119  Lys Cys Leu Leu Asn Tyr Lys Gln Glu Gly
120         485          490
121  Asp Lys Cys Val Glu Asn Pro Asn Pro Thr
122         495          500
123  Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala
124         505          510
125  Asp Ala Thr Cys Thr Glu Glu Asp Ser Gly
126         515          520
127  Ser Ser Arg Lys Lys Ile Thr Cys Glu Cys
128         525          530
129  Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp
130         535          540
131  Gly Ile Phe Cys Ser Ser
132         545

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134 <210> SEQ ID NO: 2

135 <211> LENGTH: 431

136 <212> TYPE: PRT

137 <213> ORGANISM: Artificial sequence

138 <220> FEATURE:

139 <223> OTHER INFORMATION: E. coli expressed P. falciparum MSP142 (3D7) Protein
 140 Sequence in pET(50)MSP1-42

141 <400> SEQUENCE: 2

142 Met His His His His His His Ser Ser Gly

143 1 5 10

RAW SEQUENCE LISTING

DATE: 10/01/2002

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TIME: 19:41:33

Input Set : N:\Crif3\09232002\J057531A.raw

Output Set: N:\CRF4\10012002\J057531A.raw

144	Leu Val Pro Arg Gly Ser Gly Met Lys Glu	
145		15 20
146	Thr Ala Ala Ala Lys Phe Glu Arg Gln His	
147		25 30
148	Met Asp Ser Pro Asp Leu Gly Thr Asp Asp	
149		35 40
150	Asp Asp Lys Ala Met Ala Asp Ile Gly Ser	
151		45 50
152	Ile Glu Gly Arg Gly Thr Met Ala Ile Ser	
153		55 60
154	Val Thr Met Asp Asn Ile Leu Ser Gly Phe	
155		65 70
156	Glu Asn Glu Tyr Asp Val Ile Tyr Leu Lys	
157		75 80
158	Pro Leu Ala Gly Val Tyr Arg Ser Leu Lys	
159		85 90
160	Lys Gln Ile Glu Lys Asn Ile Phe Thr Phe	
161		95 100
162	Asn Leu Asn Leu Asn Asp Ile Leu Asn Ser	
163		105 110
164	Arg Leu Lys Lys Arg Lys Tyr Phe Leu Asp	
165		115 120
166	Val Leu Glu Ser Asp Leu Met Gln Phe Lys	
167		125 130
168	His Ile Ser Ser Asn Glu Tyr Ile Ile Glu	
169		135 140
170	Asp Ser Phe Lys Leu Leu Asn Ser Glu Gln	
171		145 150
172	Lys Asn Thr Leu Leu Lys Ser Tyr Lys Tyr	
173		155 160
174	Ile Lys Glu Ser Val Glu Asn Asp Ile Lys	
175		165 170
176	Phe Ala Gln Glu Gly Ile Ser Tyr Tyr Glu	
177		175 180
178	Lys Val Leu Ala Lys Tyr Lys Asp Asp Leu	
179		185 190
180	Glu Ser Ile Lys Lys Val Ile Lys Glu Glu	
181		195 200
182	Lys Glu Lys Phe Pro Ser Ser Pro Pro Thr	
183		205 210
184	Thr Pro Pro Ser Pro Ala Lys Thr Asp Glu	
185		215 220
186	Gln Lys Lys Glu Ser Lys Phe Leu Pro Phe	
187		225 230
188	Leu Thr Asn Ile Glu Thr Leu Tyr Asn Asn	
189		235 240
190	Leu Val Asn Lys Ile Asp Asp Tyr Leu Ile	
191		245 250
192	Asn Leu Lys Ala Lys Ile Asn Asp Cys Asn	

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TIME: 19:41:33

Input Set : N:\Crf3\09232002\J057531A.raw

Output Set: N:\CRF4\10012002\J057531A.raw

193		255	260
194	Val Glu Lys Asp Glu Ala His Val Lys Ile		
195		265	270
196	Thr Lys Leu Ser Asp Leu Lys Ala Ile Asp		
197		275	280
198	Asp Lys Ile Asp Leu Phe Lys Asn Pro Tyr		
199		285	290
200	Asp Phe Glu Ala Ile Lys Lys Leu Ile Asn		
201		295	300
202	Asp Asp Thr Lys Lys Asp Met Leu Gly Lys		
203		305	310
204	Leu Leu Ser Thr Gly Leu Val Gln Asn Phe		
205		315	320
206	Pro Asn Thr Ile Ile Ser Lys Leu Ile Glu		
207		325	330
208	Gly Lys Phe Gln Asp Met Leu Asn Ile Ser		
209		335	340
210	Gln His Gln Cys Val Lys Lys Gln Cys Pro		
211		345	350
212	Glu Asn Ser Gly Cys Phe Arg His Leu Asp		
213		355	360
214	Glu Arg Glu Glu Cys Lys Cys Leu Leu Asn		
215		365	370
216	Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu		
217		375	380
218	Asn Pro Asn Pro Thr Cys Asn Glu Asn Asn		
219		385	390
220	Gly Gly Cys Asp Ala Asp Ala Thr Cys Thr		
221		395	400
222	Glu Glu Asp Ser Gly Ser Ser Arg Lys Lys		
223		405	410
224	Ile Thr Cys Glu Cys Thr Lys Pro Asp Ser		
225		415	420
226	Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser		
227		425	430
228	Ser		

230 <210> SEQ ID NO: 3

231 <211> LENGTH: 393

232 <212> TYPE: PRT

233 <213> ORGANISM: Artificial sequence

234 <220> FEATURE:

235 <223> OTHER INFORMATION: E. coli expressed P. falciparum MSP142 (3D7) Protein
236 Sequence in pET42A

237 <400> SEQUENCE: 3

238 Met Ala His His His His His His Pro Gly

239 1 5 10

240 Gly Ser Ile Glu Gly Arg Gly Thr Met Ala

241 15 20

242 Ile Ser Val Thr Met Asp Asn Ile Leu Ser

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/057,531A

DATE: 10/01/2002
TIME: 19:41:34

Input Set : N:\Crf3\09232002\J057531A.raw
Output Set: N:\CRF4\10012002\J057531A.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 3

VERIFICATION SUMMARY

DATE: 10/01/2002

PATENT APPLICATION: US/10/057,531A

TIME: 19:41:34

Input Set : N:\Crf3\09232002\J057531A.raw

Output Set: N:\CRF4\10012002\J057531A.raw

L:6 M:270 C: Current Application Number differs, Wrong Format